PATENT

Appl. No. 10/084,892

Amdt. dated July 16, 2007

Amendment under 37 CFR 1.116 Expedited Procedure

Examining Group 1639

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1-36. (Canceled)
- (New) A method for determining whether a test cell from a given tissue has an inflammatory bowel disease (IBD) or pre-IBD phenotype, said method comprising:
- (a) determining an expression level of a melanoma growth stimulatory activity (GRO1) gene product or a SLC26A2 gene product in said test cell;
- (b) comparing the expression level of said gene product in said test cell to an expression level of the same gene product in a control cell of the given tissue type; and
- (c) associating a difference in the expression level of said gene product in said test cell from the expression level of the same gene product in said control cell with an IBD or pre-IBD phenotype in said test cell.
- (New) The method of claim 37, wherein said IBD is ulcerative colitis
 (UC).
- 39. (New) The method of claim 37, wherein the expression level of said gene product in said test cell differs from the expression level of the same gene product in said control cell by at least a factor of two.
- 40. (New) The method of claim 37, wherein said test cell is obtained from a needle biopsy core, a surgical resection sample, a bowel sample, lymph node tissue, or serum.
- (New) The method of claim 37, wherein the expression level of said gene product is determined using Northern blot analysis, reverse transcription-polymerase chain reaction, in situ hybridization, or an array.

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- (New) The method of claim 41, wherein said array comprises:
- (a) a nucleic acid probe of 12-40 nucleotides in length, wherein said nucleic acid probe is complementary to said gene product and hybridizes under high stringency conditions to said gene product; and
 - (b) a substrate to which said nucleic acid probe is bound.
- 43. (New) The method of claim 42, wherein said substrate is selected from the group consisting of paper, membranes, filters, chips, pins, and glass.
- 44. (New) The method of claim 42, wherein said nucleic acid probe is bound to said substrate by covalent bonds or hydrophobic interactions.
- 45. (New) The method of claim 42, wherein said nucleic acid probe is spotted onto said substrate in a two-dimensional matrix or array.
- 46. (New) A method for determining whether a test cell from a given tissue has an ulcerative colitis (UC) phenotype, said method comprising:
- (a) determining an expression level of a melanoma growth stimulatory activity (GRO1) gene product or a SLC26A2 gene product in said test cell;
- (b) comparing the expression level of said gene product in said test cell to an expression level of the same gene product in a control cell of the given tissue type; and
- (c) associating a difference in the expression level of said gene product in said test cell from the expression level of the same gene product in said control cell with a UC phenotype in said test cell.
- 47. (New) The method of claim 46, wherein the expression level of said gene product in said test cell differs from the expression level of the same gene product in said control cell by at least a factor of two.

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48. (New) The method of claim 47, wherein an increase in the expression level of said GRO1 gene product or a decrease in the expression level of said SLC26A2 gene product by at least a factor of two in said test cell compared to the expression level of the same gene product in said control cell is associated with a UC phenotype in said test cell.

- 49. (New) The method of claim 46, wherein said test cell is obtained from a needle biopsy core, a surgical resection sample, a bowel sample, lymph node tissue, or serum.
- 50. (New) The method of claim 46, wherein the expression level of said gene product is determined using Northern blot analysis, reverse transcription-polymerase chain reaction, in situ hybridization, or an array.
 - 51. (New) The method of claim 50, wherein said array comprises:
- (a) a nucleic acid probe of 12-40 nucleotides in length, wherein said nucleic acid probe is complementary to said gene product and hybridizes under high stringency conditions to said gene product; and
 - (b) a substrate to which said nucleic acid probe is bound.
- 52. (New) The method of claim 51, wherein said substrate is selected from the group consisting of paper, membranes, filters, chips, pins, and glass.
- 53. (New) The method of claim 51, wherein said nucleic acid probe is bound to said substrate by covalent bonds or hydrophobic interactions.
- 54. (New) The method of claim 51, wherein said nucleic acid probe is spotted onto said substrate in a two-dimensional matrix or array.